Defense Information Systems Agency

A Combat Support Agency

DoD Teleport Program Update

Rusty Collins

Deputy Program Manager

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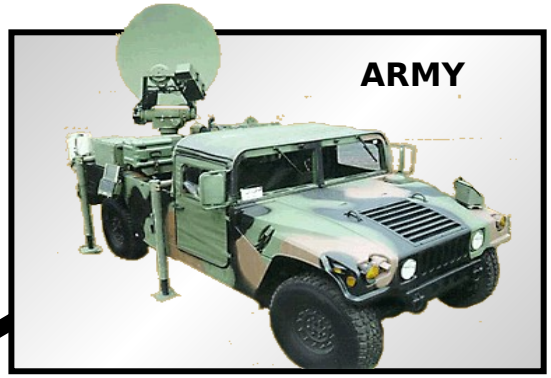
READY ~ RELIABLE ~ RELEVANT

Agenda

- **Overview**
  - **Program Overview**
  - **STEP to Teleport**
  - **Teleport Locations**
  - **What We Are Building**
  - **Teleport Team**
- **Teleport Capabilities**
- **Status of Generation 1 & 2**
- **Discussion/Questions**

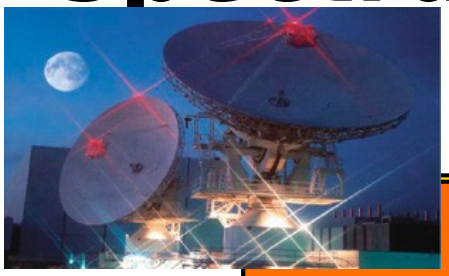
Program Overview

- **Provide Critical Support for the Deployed Warfighter**
  - **Global Information Grid (GIG) Compliant Network Solutions**
  - **Enhanced Seamless Access to Critical Information Sources**
- **Provide High Bandwidth, Multiband, Multimode TelecommunicationsTransport**
- **Serve as a Media Enhancing Interoperability “Junction” for Space and Terrestrial Information Distribution**
  - **Cornerstone of GIG**



Teleport is Relevant to the Warfighter.

STEP to Teleport: Multiple Means / Multiple Spectrums



Major Theater Operations

MBps
1,300
184
4
5
STEP
Teleport – Gen 1
Teleport – Gen 2 IP
Circuit
FY00
FY06
FY08

DISN Services

TELEPORT

NET-CENTRIC & EXISTING

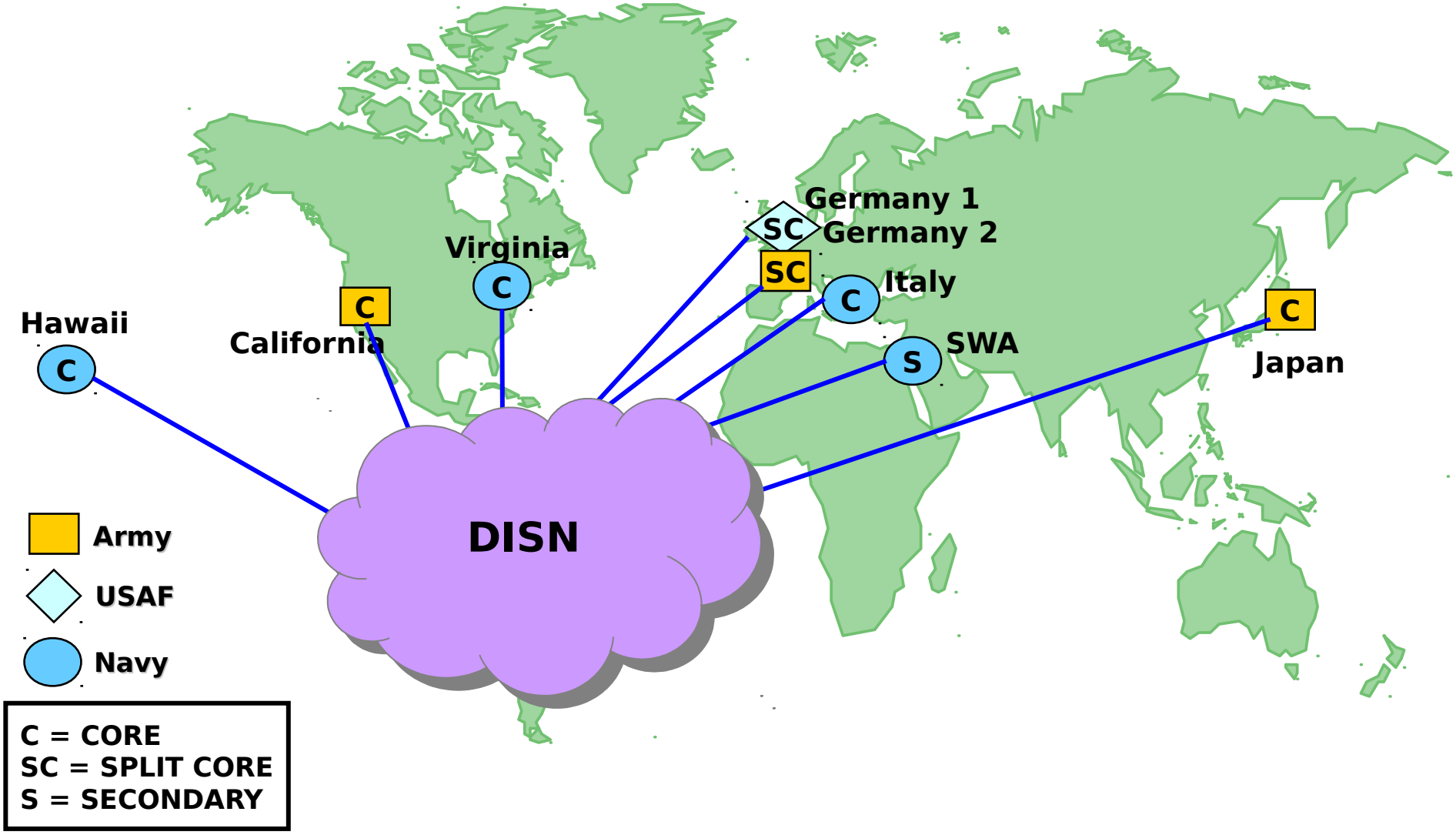
Net-centric IP Capability:
- dynamic bandwidth allocation
- QOS/COS IP routing
- bandwidth efficiencies

Standardized Interface:
- modem conversions
- crypto
- switching

EHF
UHF
C
Ku
Ka
X

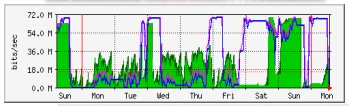
EHF (Adv EHF)
UHF & MUOS
C-Band
Ku-Band
X-Band
Ka-Band

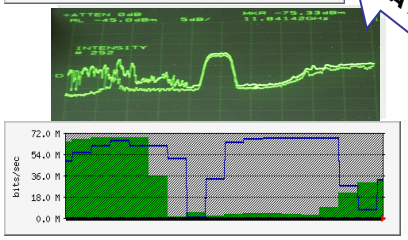
Teleport System Locations



Strategically Located Sites

What We Are Building





INMS/TNC

IA ACCESS

Baseband Segment

Multiplexing and Routing Element

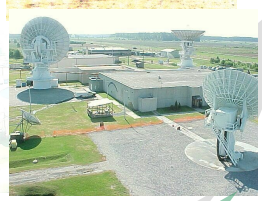
Modem Element

Encryption Element

Switch Matrix Element

Management and Control Segment

Deployed JTF



DISN/DATMS
i.e. NIPRNET
DSN/VTC

IA ACCESS

ATM

Network Centric

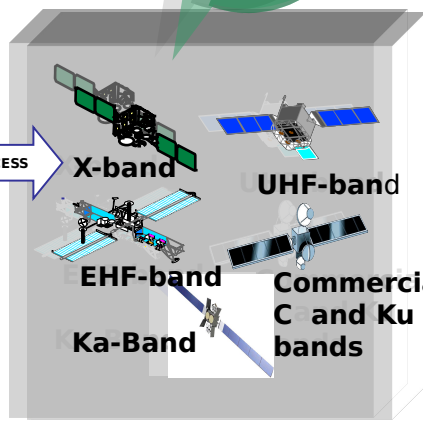
DISN Service Interfaces

Promina

C Band Ku Band UHF

EHF X Band Ka Band

IA ACCESS



X-band UHF-band EHF-band Commercial C and Ku bands Ka-Band

Space Segment

Legacy C4ISR Systems

IA ACCESS

Network Services Segment

Earth Terminal Segment

Teleport Team Roles and Responsibilities

- **Navy**
  - Teleport requirements owner
  - Develops required JCIDS documents (CDDs, CPD, CONOPs)
- **Joint Staff**
  - Validates and approves operational requirements (J8)
  - Validates and approves capacity requirements (J6)
- **JFCOM**
  - User representative
- **ASD(NII)**
  - Milestone Decision Authority (ACAT I MAIS Program)
  - Performs Analyses of Alternatives
- **DISA**
  - Executive Agent for Acquisition
  - DISA Teleport PMO (Design, acquire, integrate, test, accredit, & field)
  - DISA IP Network Manager
- **STRATCOM**
  - SATCOM Operational Manager
  - Directs operational management of DoD-owned and leased SATCOM resources
  - Publishes operational procedures
- **Services**
  - Performs Operations & Maintenance of system components

Requirements

Acquisition

Operations

Teleport Capabilities

Capabilities	Procure	Install	Test	Operational
Gen 1 IOC 1 • Added C & Ku band at four STEP sites	✓	✓	✓	Mar 04
Gen 1 IOC 2 • Added UHF capability at same four sites	✓	✓	✓	Nov 06
Gen 1 IOC 3 • Expanded C, Ku, and UHF capabilities to six sites; added EHF (including Bahrain); added Limited IP capability in CONUS	✓	✓	✓	Mar 07
Gen 1 IOC 4 • Integrate military Ka-band at five sites	✓	✓	✓	30 Sep 09*
Gen 2 Phase 1 • Implemented initial global Net-Centric capability, added current force IP modems (iDirect, LinkWay) at six sites	✓	✓	✓	Nov 08
Gen 2 Phase 2	✓	In Work	In Work	31 March 10**

*Based on availability of WGS-2

**Based upon launch and availability of WGS-3

Teleport Update

- Generation Two Phase One commissioned Nov 2008
- Generation Two Phase Two (G2P2) enhancements include:
  - Linkstar DVBS2-RCS
  - Linkway 8.0, iDirect 7.1.2
  - DVB-S Broadcast (GBS requirement)
- Conducted G2P2 DT Jan 2009
- Scenario Based Training (SBT)
  - Wahiawa – December *2008*
  - Ft. Buckner – 3/16/09 – 3/27/09
  - Landstuhl/Ramstein – 7/11/09-7/23/09
  - Lago Patria – 7/27/09-8/07/09
- G2P2 MOT&E scheduled for 8 June through 3 July 09

Status of Generation 1 & 2

- Teleport Milestone Decision Authority was notified that the program cannot meet its threshold schedule date of March 2009 for completion of Gen 1 and Gen 2 due to slips in WGS 2 and WGS 3 launches
  - WGS 2 launched 3 April 09 and will have an operational availability expected by September 2009
  - WGS 3 launch is currently scheduled for 5 August 09; operational availability expected by February 2010

- “Critical Change” Report to Congress required – final executive review conducted 20 March

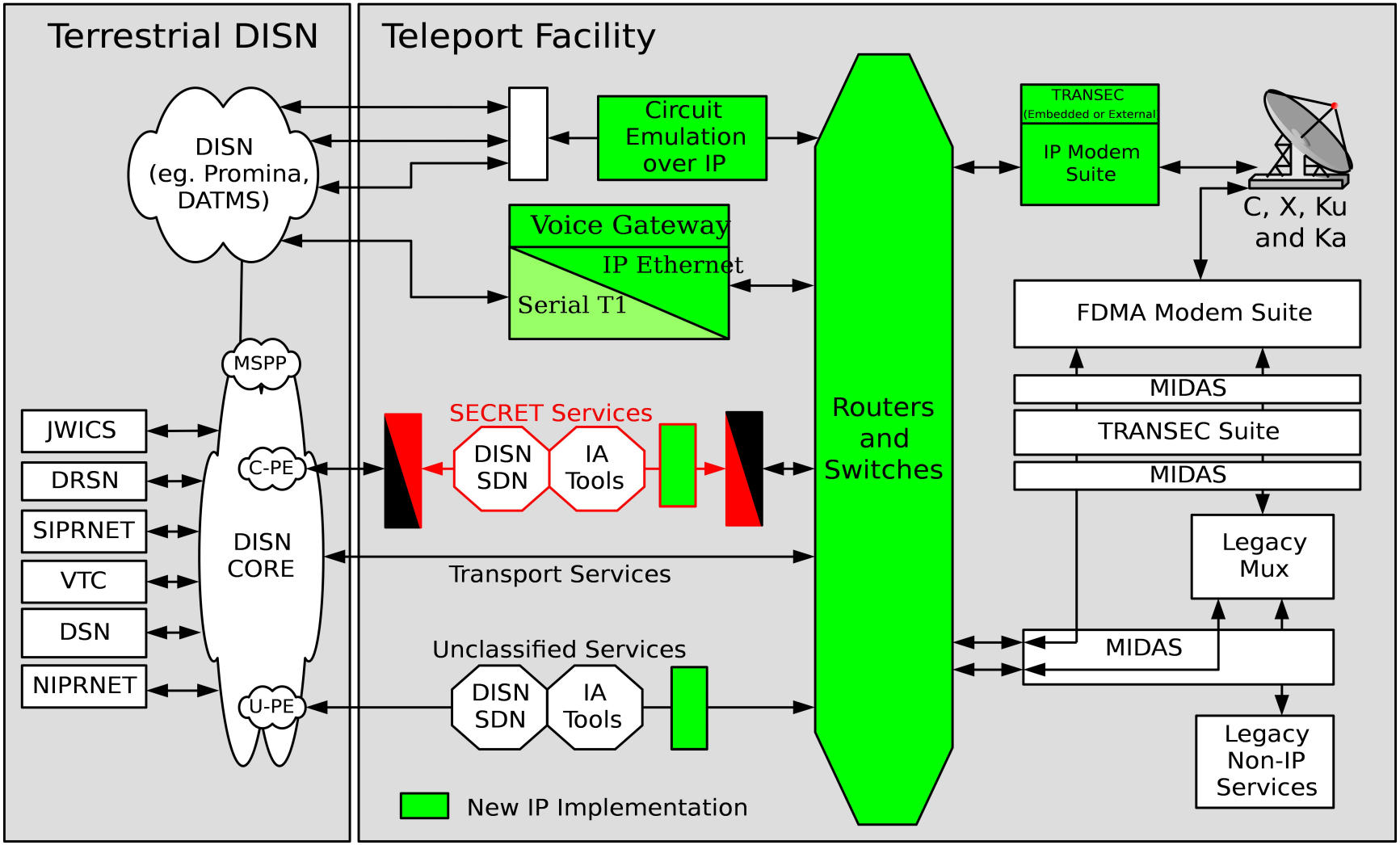
- Proposing the “rolling” commissioning of all Gen 1 and Gen 2 capabilities after successful operational test as each WGS satellite goes operational

Questions
-
Discussion

DEFENSE INFORMATION SYSTEMS AGENCY

BACKUPS

DISA Net-centric Functional Diagram



Green items M&C by IP NOC, but Site performs Limited O

DISA Gen II Net-centric System View